Patent Claims

1. Microscope comprising a base body or a stand, a stage support, a guide for adjusting the stage support or an objective changer device with inserted objectives, and a stage for holding the object or specimen, characterized in that a supporting cell (7; 36) is provided and is connected to the stand (1; 30), preferably rigidly but so as to be exchangeable, and in that a first assembly is provided for receiving, holding and adjusting the objective (10; 41) and a second assembly is provided for positioning the object (19) or specimen relative to the objective (10; 41).

2. Microscope according to claim 1, characterized in that the supporting cell (7; 36) is rigidly fastened to a plurality of projections (8; 37) of the stand (1; 30).

3. Microscope according to claim 2, characterized in that damping and/or vibration-isolating intermediate layers (48) are arranged between the supporting cell (7; 36) and the contact surfaces of the projections (8; 37) of the stand (1; 30).

4. Microscope according to claim 1, characterized in that the supporting cell (7; 36) is arranged at the stand (1; 30) in a springing manner.

5. Microscope according to claim 1, characterized in that the first assembly is designed as an objective changer device and/or as an objective focusing device.

6. Microscope according to claim 1, characterized in that the second assembly comprises a stage support (17), a stage guide, and a stage (18; 45).

7. Microscope according to one of claims 1 to 6, characterized in that the supporting cell (7; 36) is optimized with respect to rigidity, use of material, dimensioning and thermal behavior while adhering to requirements for high stability and imaging quality of the microscope.

8. Microscope according to one of claims 1 to 7, characterized in that an objective changer device constructed as an objective turret (15; 40) is arranged at the supporting cell (7; 36).

9. Microscope according to one of claims 1 to 8, characterized in that means (20) for arranging a condenser (21) are provided at the stage support (17).

10. Microscope according to one of claims 1 to 8, characterized in that the stage guide has a guide plate (11; 38) that is fixedly arranged at the supporting cell (7; 36) and guide elements (12) at the stage support (17) which are in an operative connection with the guide plate (11).

11. Microscope according to one of claims 1 to 8, characterized in that the supporting cell (7; 36) comprises a thermally invariant ceramic material, sintered material or other suitable material or a combination of such materials.